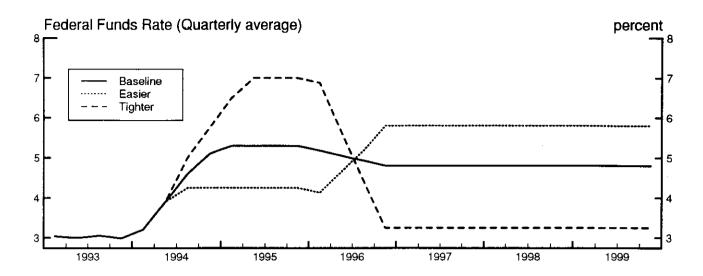
## Long-run Ranges Donald L. Kohn

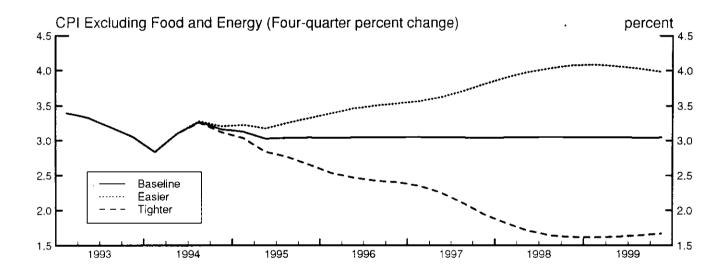
As background for consideration of longer-term policy issues, including the choice of money ranges, the bluebook provided some 5-year paths for the economy under a variety of assumptions about monetary policy actions and about the characteristics of the economy. I'd like to highlight a few aspects of these results related importantly to one question addressed by Mike--that is, where the economy is relative to its potential.

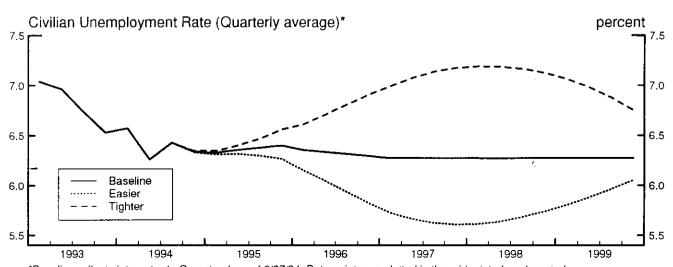
In contrast to bluebooks over recent years, the alternative policy scenarios included only a tighter alternative to a baseline embodying the greenbook forecast and a judgmental extension. These are shown in the chart distributed this morning. The greenbook/baseline just holds the line on inflation, and we assumed a high level of intolerance by the FOMC to allowing inflation to strengthen appreciably from its recent pace. If the staff is right in its assessment of the Committee's objectives and the economy's potential, there is no acceptable easier scenario, since any decline in unemployment would bring about accelerating prices.

After yesterday's discussion, I did rescue an easier scenario from the electronic trash bin to look at the effects of holding the funds rates unchanged through 1995. The results are also plotted in the chart. Owing to the sluggish adjustment of long-term to short-term interest rates and of spending to long-term rates, differences in output and inflation are only beginning to be perceptible at the end of 1995. But an inflationary process is underway. The effects of low real interest rates on demand are felt even more strongly in 1996, pushing the unemployment rate further below its natural rate, causing

## ALTERNATIVE STRATEGIES FOR MONETARY POLICY







\*Baseline reflects interest rate Greenbook as of 6/27/94. Data points are plotted in the midpoint of each period. The unemployment rate is shown on the 1994-survey basis. Observations in 1993 were level-adjusted up 0.3 percentage points.

prices to accelerate more noticeably in 1996 and thereafter. In the simulation, we tightened policy in 1996 to bring the unemployment rate back toward the natural rate and truncate the rise in inflation.

A second set of simulations, given on chart 3 following page 11 of the Bluebook, looks at the implications of different views of the economy's potential--specifically that the NAIRU is a half-point higher or lower than the staff estimate. Uncertainties about the supply side of the economy can pose difficulties for the implementation of monetary policy.

For one, the evidence on NAIRUs is mostly indirect, inferred primarily from the behavior of compensation and prices, and because of lags and rigidities, deviations of these measures from expectations based on an incorrect estimate of the NAIRU develop only slowly. In our simulations, we postulated that the FOMC would recognize and begin responding to differences between the true NAIRU and the staff estimate once four-quarter CPI growth deviated by .3 from the baseline, but this did not occur until the later part of 1995. This lag has costs in terms either of foregone output if the NAIRU is lower or of more inflation for some time if it is higher.

Moreover, required adjustments in short-term nominal rates to different underlying NAIRUs can be substantial—and considerably greater than simply taking account of the effects of varying inflation premiums. Real interest rates themselves must be altered to bring output into line with a different level of potential; for example, a lower NAIRU means higher potential output, which requires lower real rates to attain. The problems caused by recognition lags suggest the value of close attention to trends in price and cost data for clues about the supply side of the economy, and perhaps also the

desirability of being ready to adjust policy instruments flexibly, taking risks from time to time, but being willing to reverse course.

The different scenarios do not map readily into money growth paths, but the choice of intermediate-term ranges can convey some information about monetary policy intentions. For 1994, the staff is projecting expansion at the lower bound of the current M2 and M3 ranges, as can be seen on page 13. Unlike the last few years, the sluggish expansion of M2 and rise in its velocity in 1994 are primarily a consequence of the increase in opportunity costs associated with tighter monetary policy, and less so of a further shift in money demand. Diversion of savings from M2 into longer-term mutual funds appears to have slowed substantially; indeed, reflows from bond funds into money market funds temporarily boosted M2 this Spring. Looking ahead, we are projecting continued flows into long-term mutual funds, but at a much reduced pace from 1992 and 1993. Households are assumed to have a greater appreciation of the risks involved in these investments, and incentives to shift funds will diminish as deposit rates rise while long-term rates are stable or move lower in the staff forecast. This leaves the traditional short-run opportunity cost and income variables as the primary influences on money growth. The actual and projected further rise in short-term interest rates and opportunity costs assumed in the staff forecast subtracts 3 to 4 percentage points from projected M2 growth in 1994. The higher opportunity costs of 1994 also damp M2 relative to spending next year, but by less. Hence, we see M2 growth picking up a little--to 2 percent-over 1995.

In the staff forecast, debt is projected to grow about in line with nominal income over the next 18 months--at about a 5 percent pace. The depository share of lending is picking up in the wake of

the increase in bond rates and with the recovery of what remains of the thrift industry. Nonetheless, M3 remains quite damped, showing no increase this year and only a small rise next. The rise in interest rates plays only a small role in the forecast of M3; rather, we see depositories as continuing to rely on non-M3 sources of funds, including additions to their capital base, and meeting increased loan demand in part by limiting acquisitions of securities, which have been unusually large through the years of weak loan growth.

Against this background, the staff has suggested two alternative sets of ranges for this year and next-the current ranges and ranges that are one percentage point lower, as shown for 1994 on page 17. In contrast to recent years, the choice between these ranges would seem to be more than simply a technical matter to take account of unexpected downward shifts in money demand, but rather could have some potential implications about the message the Committee might want to communicate about its policy objectives and plans. The lower ranges of alternative II might be chosen if the Committee wanted to emphasize its determination to contain inflation and felt that doing so might well require higher interest rates over the balance of the year, as in the staff forecast. Although the staff has projected the Ms along the lower bound of their current ranges, reduced ranges for this year might provide a better guide to expectations about the money growth likely to be consistent with such a policy. The lower ranges might be considered even more appropriate if the Committee were determined to continue making progress toward price stability.

If the Committee sees further rate increases as less likely, the odds on undershooting the existing money ranges are somewhat smaller. We estimate that the further rise in rates this year subtracts maybe one-half percentage point from M2 growth, given Greenbook

GDP. Alternatively, in an era of uncertainty about the behavior of money demand over the short and intermediate runs, the Committee might view the current ranges as less a guide to current policy than a long-run benchmark for money growth consistent with price stability and normal velocity behavior. This was not the intent of the Humphrey-Hawkins Act, but the Committee may feel that questions about the stability of money demand mean that providing such a benchmark is the best guidance it can give the public. If velocity went back to varying around a constant long-run level, M2 growth in its 1 to 5 percent range would support nominal GDP of around 3 percent over time--in line with price stability and trend growth in potential. An undershoot of the current ranges perhaps could be explained by residual shifts in money demand, and in any case, the lower M2 growth is expected to be consistent with growth in nominal GDP this year close to 5-1/2 percent, implying another large increase in velocity.

Whatever its decision on money ranges, the Committee might wish to give serious consideration to reducing the debt range. The current debt range seems high if debt growth remains roughly in line with nominal GDP. Containing inflation, much less making progress toward price stability, would require nominal GDP running below 6 percent—the midpoint of the current range. Debt is now in the lower half of the range, and the Committee could reduce this range to underline its concern about the implications for inflation and for financial stability if borrowing were to accelerate appreciably.

As for 1995, the bluebook suggested that, given uncertainties about the interest rates consistent with desired nominal spending and about money demand for given interest rates and spending, the Committee might wish to simply carry over whatever ranges it settled on for 1994 into 1995. The Committee might consider two variations on this

theme. If it reduces the 1994 ranges, it might want to stick with the higher money ranges for 1995 on the basis of the benchmark argument. Second, even if the Committee chose to leave all the ranges unchanged for 1994, it might consider lowering just the debt range for 1995 for the reasons just given.

Finally, as you were informed last Friday, Chairman Riegle has requested that economic projections of the Committee for 1996 be included in the Humphrey-Hawkins material. The FOMC ruled out providing the Congress with 1995 projections last February. At that time, some FOMC members noted that the projections for 1995 did not seem to match the Committee's stated objectives, especially with regard to reducing inflation. Presumably, the Banking Committee is interested in what emphasis you are putting on that objective; they also seem to be trying to get your sense of the level and growth of economic potential, which they see as important influences on policy decisions. The central tendencies of the projections you turned in this time for 1996 closely resemble your outlook for 1995--real growth around trend and unemployment at recent levels, with CPI inflation at or just over 3 percent.

The information provided could be useful to Congress and the public in gauging the objectives and strategy of the FOMC. The risk is that it would be misunderstood--that the FOMC would be seen as having targets for variables not under its control over the longer run, such as the sustainable level of economic growth and unemployment. And, Congress could be tempted to hold the FOMC more accountable for misses in these variables than in inflation projections. The situation would be especially difficult in the case of an adverse supply shock or should the NAIRU turn out on the high side of current projections, particularly if the FOMC took timely action so that

misses in inflation seemed smaller or were slower to develop than deviations from forecasts of output or unemployment.

The Committee would seem to have several options. One would be not to provide projections and explain the concerns that led the FOMC to reject the request. A second would be not to provide specific projections but to have the Chairman in his testimony discuss some of the important factors bearing on trends in growth, prices and unemployment, stressing uncertainties and the role of monetary policy. This alternative could include some broad quantitative notion of longer-term trends; CEA and CBO for example, do give longer-run projections as requested, though these agencies tend not to be held quite so accountable for outcomes. A third would be to provide specific projections, but explain carefully associated uncertainties and the circumstances in which the projections would not and should not be met.

## Short-run Policy Donald L. Kohn

Judging from the May press release, and from the logic of the Committee's strategy, policy implementation would seem to be entering a new phase. In earlier months this year the Committee knew that short-term real rates needed to be adjusted appreciably higher--at least to something more in line with historical experience for noninflationary growth. Policy might now be seen as back in its more usual mode in which the federal funds rate is not so obviously greatly out of kilter, and actions are more dependent on assessing incoming financial and economic data for clues about future developments in aggregate demand and prices.

The issue at present is whether aggregate demand will slow sufficiently to keep inflation in line with Committee intentions without additional restraint in the reserves market. Some further tightening over coming months is widely anticipated. In that regard, the Greenbook forecast has already been extensively discussed. In the financial markets, yield curves are still steeply upward sloped; they appear to incorporate a substantial further increase in short-term rates over the next six months, roughly approximating the firming assumed in the staff forecast. Moreover, in contrast to the staff forecast, futures and forward rates suggest expectations of appreciable additional tightening over 1995 as well. Private forecasters, as captured by the Blue Chip averages or yesterday's <u>Wall Street Journal</u>, foresee a much gentler upward trajectory for short-term rates, but in those projections such an increase is not sufficient to damp inflation, which accelerates in 1995.

In light of the ambiguity in the second-quarter economic data and questions about the effects of earlier rate increases, however, the Committee today may want to chose Alternative B to await a better sense of how the economy and prices are developing. The recent behavior of financial flows also could be seen as supporting a "wait and see" policy. Broad money aggregates fell over May and June, and growth in M1 was modest. Bank credit has slowed substantially over the past two months, and total and nonfederal debt are estimated to be remaining on their moderate growth paths. Debt is a contemporaneous indicator of spending, and money weakness can be explained by the Committee's previous actions. Still, these data do not seem to suggest an unanticipated surge in borrowing and spending. If domestic demand is indeed decelerating rapidly, and the economy has not already overshot its potential, the decline in the dollar over recent weeks should not be a serious inflationary threat, and any uptick in inflation expectations should be self-correcting.

Nonetheless, if the Committee saw the economy quite likely near potential, and inflation expectations in financial markets very tender, it may wish to consider an asymmetrical directive under alternative B. Such a directive would imply a prompt reaction should incoming data indicate growth persisting well in excess of the growth of potential or indicate developing inflation pressures. There are a number of key indicators coming soon, including the employment report this Friday and the usual monthly reports on prices and spending in the ensuing weeks. Data showing the economy not slowing to a more sustainable pace, or the unemployment rate dropping further, might indicate that the federal funds rate is not yet high enough to bring the economy in at potential. To be sure, the effects of previous increases in short- and long-term rates have not yet worked through to

aggregate demand, but additional firming might still be called for if the Committee wanted to err on the side of avoiding situations in which inflation could accelerate. Strong data without System action could risk a deterioration in bond and foreign exchange markets, especially if, against the background of May's press release, participants interpreted the lack of response as indicating that the Federal Reserve would be sluggish in reacting to evidence of the need for further tightening.

If, however, the risks were already seen to be unacceptably high that inflation would begin to accelerate, the Committee could choose to tighten at this meeting, perhaps by the 25 basis points of Alternative C. Arguments in favor of immediate action might include the recent behavior of financial and commodity markets, which could be seen as suggesting that inflation expectations had already begun to erode; especially with output close to potential, higher inflation expectations could have persistent effects on actual inflation. tightening would be a bit of a surprise to markets, and could have a salutary effect on inflation expectations. Its effects on longer-term real rates are more difficult to pinpoint; there is a risk that markets would simply elevate the expected trajectory of tightening. But further firming is already built into the structure of rates, and the experience of 1988 might suggest that a string of timely firming moves need not ratchet long-term rates higher. Presumably any such action would be taken in a broader context of domestic inflation and growth, with the dollar only one consideration bearing on that broader outlook. As Peter noted yesterday, market participants have expressed concerns that a 25 basis point increase could be counterproductive for the dollar if it were seen as aimed only at propping up the currency. Such a firming might be insufficient to turn around sour market

psychology, but would represent one piece of ammunition already expended and unavailable for later use. Clearly, the market context of any action would have to be weighed carefully. But if the Committee felt action was needed, it would have to consider whether it wanted to allow the dollar to deter such action, especially in light of the difficulty of predicting market dynamics.

Finally, if the FOMC were to decide to leave the federal funds rate unchanged at this meeting, it would have to consider what, if anything, to announce. One possibility would be to announce explicitly that the Committee had decided to leave reserve conditions unchanged. The difficulty with this option is that it might be read as implying no change for a considerable period, and possible actions in the weeks immediately after the meeting might be constrained by concerns about having misled markets. An alternative would be to simply announce that the meeting was over, perhaps supplemented by the fact that there would be no policy announcement. The difference is subtle, but may keep some options open, especially at those times the Committee is strongly asymmetrical in its leanings.